

## **Historic, archived document**

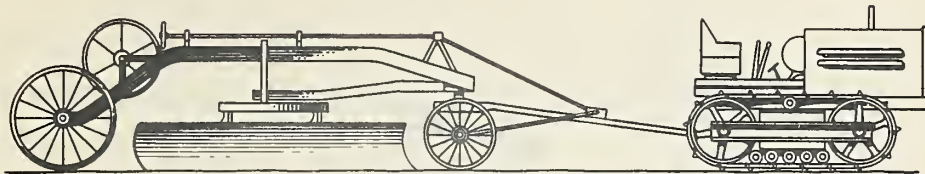
Do not assume content reflects current scientific knowledge, policies, or practices.



*1.9 F76ch*

*Library  
RECEIVED  
★ SEP 14 1940 ★  
U.S. Department of Agriculture*

# CONSTRUCTION



## HINTS

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE  
WASHINGTON, D. C.

Volume 6

July, 1940

Number 7

Several months ago, a CCC enrollee was thrown from a 25 h.p. Allis-Chalmers tractor which was being used by the Soil Conservation Service. It was noted that this tractor was light and when it ran over rocks or other obstructions it caused the operator to be thrown from his seat unless he could be properly braced.

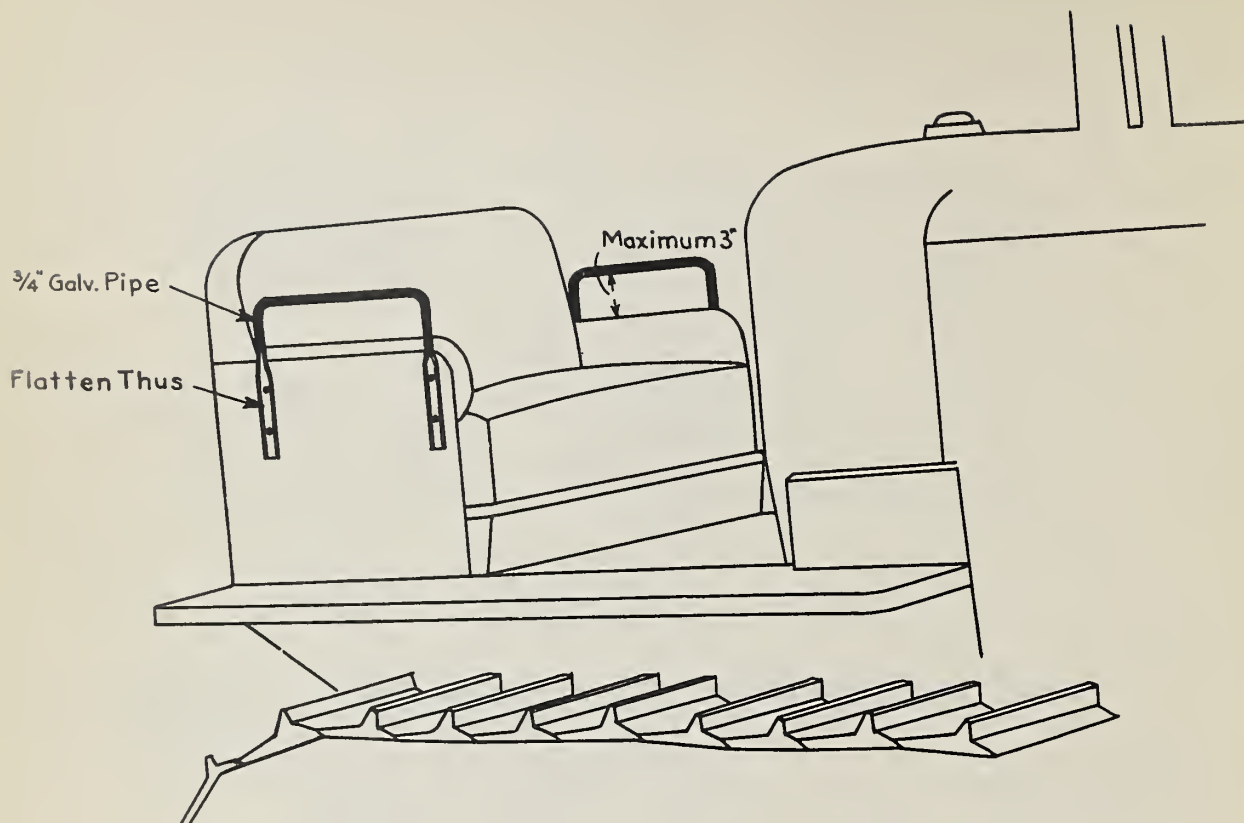
The suggestion was made at one of the CCC Safety Council meetings that a plan be submitted to the Agencies for the installation of hand holds on the seats of tractors so that the enrollee driver might be able to hold himself on the tractor while riding over rough terrain.

Mr. S. M. Lauderdale of the office of the Director, CCC, has furnished this office with the grab handles shown on page 2. These handles were submitted by Mr. J. W. Stickley, Supervising Mechanic of the SCS.

The CCC also furnished the simple but effective axe guard shown on page 3. This guard was suggested by Frank Cabral, enrollee blacksmith, Camp Seiad F-176. He used about 1'-9" of old air hose, slashed openings near each end to insert axe edges and cut away the hose leaving a strap across the top of the axe.

The horse trailer shown on page 4 was designed and built in Region 1. A list of materials is also included. The weight is approximately 850 pounds and the cost, built in the central shops, is about \$200.00. Large scale detailed prints, Numbers C56-01 and C56-02, can be obtained from the Regional Forester, Missoula, Montana.

E. S. Massie  
Editor



METHOD OF ATTACHING  
 GRAB HANDLES TO TRACTOR SEAT  
 AREA 2 DANVILLE, VIRGINIA  
 UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 H. H. BENNETT, CHIEF

REFERENCE: J. W. STICKLEY

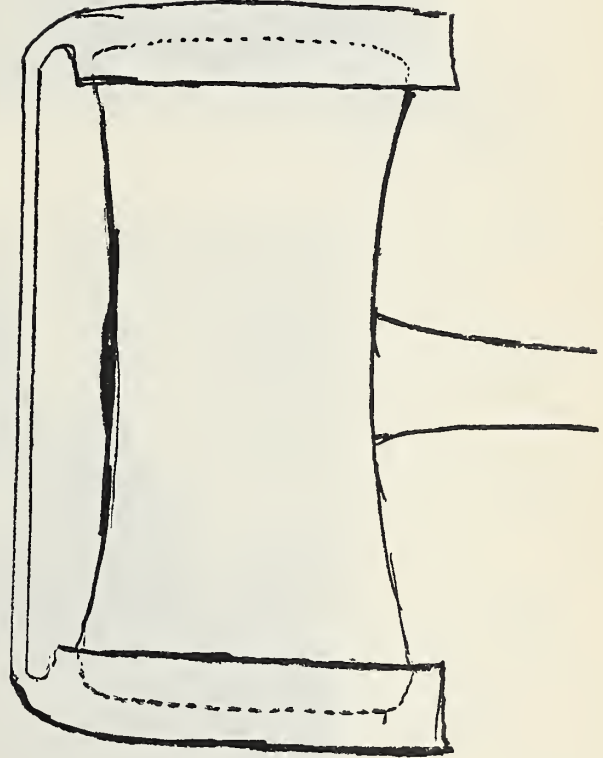
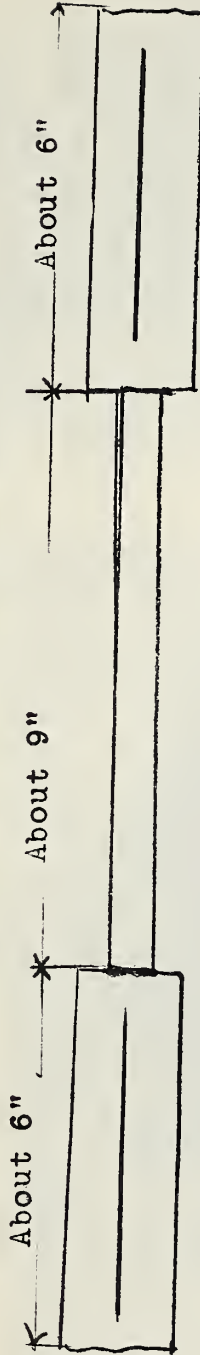
SUBMITTED:

APPROVED:

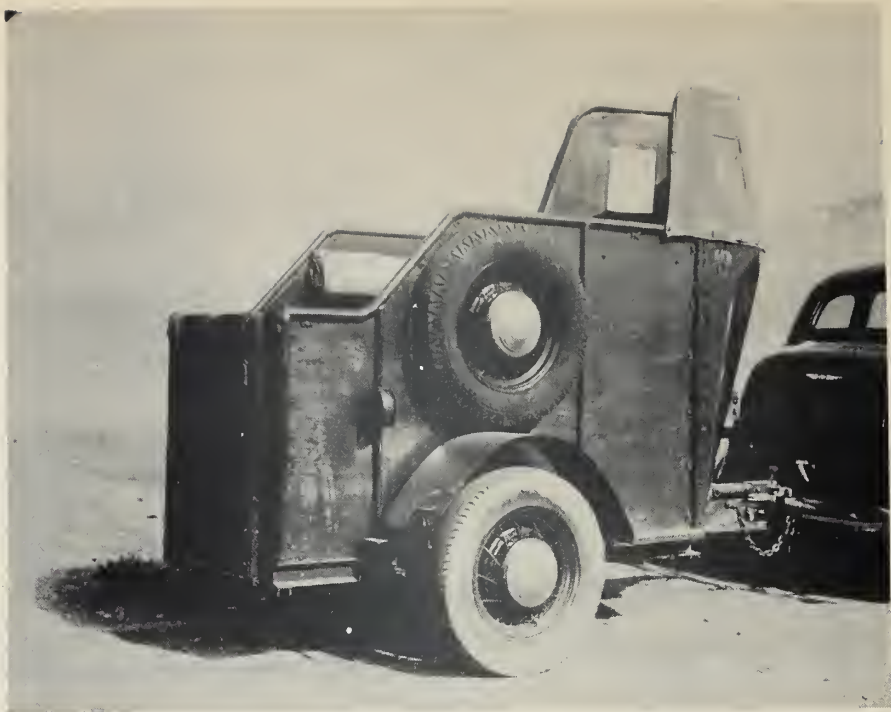
COMPILED	TRACED	CHECKED	DATE	DRAWING NUMBER
C.D.M.	C.D.M.	E.H.H.	1-25-40	2L-5814

SEIAD F-176  
SEIAD VALLEY, CALIFORNIA

Axe Guard made of one inch Air Hose.



Designed and made up  
by Frank Cabral, En-  
rollee blacksmith.  
Camp Seiad F-176





# MATERIAL LIST FOR HORSE TRAILER

## Drawings C56-01 and C56-02

		Total Length Feet	Weight per ft.	Total Weight
3	Wheel and tire assy at 60# (6.00 x 16 tires)			180.
2	Spring assy at 30# (Chev. 1½-ton front)			60.
	Axle--1½" std. pipe	4'4"	2.717	11.75
2	Spring pad plates ½x4-5" long	10"	3.4	2.83
	Axle drops - ½x3 strap	2'8"	2.55	6.80
	½x2½ "	1'8"	2.125	3.54
2	Spindles at 2#			4.00
4	Spring U bolts 8" ea. ½" φ	2'8"	.668	1.78
8	U bolt nuts and washers. ½" SAE			1.00
Rear spring hangers:		Equiv. 1" bar ½t		
	2-5½x5x½ )			
	2-4x5x½ )	9.6'	.850	8.1
	2-5x4x½ (5 )			
	2-1½φ 1-3/4 long	1/6	.6008	2.0
Front spring hangers:		Equiv. 1" bar ½t		
	4-4x4x½ plates)			
	2-4x4x½ (5 )	6.65'	.850	5.65
	2-3/8 plates 2½x4	2/3'	3.188	2.15
Side frame 2 - 3" 5 75" long. ea.		12-1/2	4.1	51.4
Front frame V 3" 40' long		3-1/3	4.1	13.7
7	Cross member floor supports 2x1x3/16 38" long	22.2	2.57	57.0
1	Rear floor edge angle 1x1x3/16 - 38"	3.16	1.16	3.68
5	Floor boards and outside steps - 5/4.	33.3	2.35	77.5

	Total Length Feet	Weight per ft.	Total Weight
Front panel angle - 40" long	3-1/3	1.16	3.75
Front floor support plates 3/16"x2"	2 1/2	1.275	3.20
(Tongue brackets -2 trap 12x7x6 3/16	)		
25.9 plate	126 □	.053 □	8.75
(Tongue gussets 2 1/4 13x3 3/16 plate	39 □		
(Tongue - 2" std. pipe	4-3/4	3.652	17.15
Superstructure frame 1 1/4" thin wall conduit	45	.985	44.3
1"x1" step bolts for side panels. 50 per side 100 pc. 3#/100			3.
1"x2" " " " " " 15 " " 30 " 4.6#/100)			
1"x2" " " " floor 80 " 4.6#/100)			5
Panel posts and w.s. frame 3/4" thin wall			
conduit	31	.488	15.2
1/8 x 1 panel bolting bar	60	.425	25.6
1"x1 1/2" bar - for gate lock	8	1.063	8.5
1"x1 1/2" bar - gate hinges	5	1.275	6.4
1/2" ϕ rod - gate hinge pin	3	.668	2.0
1/8"x1" bar for fender brackets	6	.425	2.55
1"x1"x1/8" angle fender brackets	5	.80	4.0
1/8 x 1 bar for step brackets	2	.425	.85
#24 ga. steel sheet front panel	20.4 #	1.00	20.4
#16 ga. steel sheet fenders	9 1/2 #	2.50	24.0
1"x3" step bolts rear gate	50	5.9#/100	3.
Cinch curtain fasteners with topped shank	30		
1"x2 1/4" wide oak flooring (rear gate)	52 lin.ft.	.60	31.2
2"x1 1/2" oak posts (rear gate)	9	1.04	10.0
1/2" thick panel ply wood	62 #	1.65	105
2 Chevrolet tail and stop lite assy.,			
with 25' of wire and plug assy.			
Windshield curtain with celluloid.			
1 Haco hitch.			
Canvas for side and breast pads.			